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# (12) United States Patent

Drennen et al.

#### (54) ELECTROMECHANICAL ACTUATOR PROXIMAL POSITION STOPPING ASSEMBLY

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## (57) ABSTRACT

An electromechanical actuator (EMA) is disclosed. The EMA may comprise an EMA housing, a ball nut extending axially within the EMA housing, a ball screw extending axially within the ball nut, and/or an actuator drive unit (ADU) housing extending axially within the ball screw, the ADU housing having a proximal stop that extends radially outward of the ADU housing. The ball nut may be configured to translate axially in a proximal direction in response to a rotation by the ball screw, and the ball nut may be configured to be halted in the axially proximal translation in response to contact with the proximal stop. The proximal stop may be coupled to the ADU housing. The proximal stop may comprise a continuous annular structure.

## 13 Claims, 5 Drawing Sheets

